

REMARKS

Please cancel Claims 2 and 8-14 without prejudice. Claims 1, 3-7 and 15-21 are pending. Claims 1, 6-7 and 15-17 are amended herein. Support for the claim amendments can be found at least in Figure 1 of the instant application.

102 Rejections

The instant Office Action states that Claims 1, 3-5, 7, 15-19 and 21 are rejected under 35 U.S.C. § 102(b) as being anticipated by Rodgers (U.S. Patent No. 4,222,063). The Applicants have reviewed the cited reference and respectfully submit that the present invention as recited in Claims 1, 3-5, 7, 15-19 and 21 is not anticipated nor rendered obvious by Rodgers.

Applicants respectfully submit that Rodgers does not show or suggest “a bit line region enclosed within and surrounded by said silicon substrate” as recited in independent Claim 1. Looking at Figure 2 of Rodgers, for example, the bit lines 28 do not lie in the silicon substrate 22 at all. Accordingly, Applicants respectfully submit that Rodgers does not show or suggest the limitations of Claim 1. Claims 3-5 and 7 are dependent on Claim 1 and recite additional limitations.

Applicants also respectfully submit that Rodgers does not show or suggest “a plurality of bit lines, each bit line of said plurality of bit lines essentially perpendicular to said word line, said each bit line buried within said substrate, said each bit line in cross-section having a first portion and a second portion that is essentially at a right angle to said first portion” as

recited in independent Claim 15. Applicants understand Rodgers to only describe V-shaped floating gates 42, and the bit lines 28 of Rodgers do not have a cross-section such as that recited in Claim 15. Accordingly, Applicants respectfully submit that Rodgers does not show or suggest the limitations of Claim 15. Claims 16-19 and 21 are dependent on Claim 15 and recite additional limitations.

In summary, Applicants respectfully submit that Rodgers does not show or suggest the claimed features of the present invention as recited in independent Claims 1 and 15, and that these claims are in condition for allowance. Applicants also respectfully submit that Rodgers does not show or suggest the additional claimed features of the present invention as recited in Claims 3-5, 7, 16-19 and 21 dependent on either Claim 1 or 15, and that Claims 3-5, 7, 16-19 and 21 are also in condition for allowance as being dependent on allowable base claims. As such, the Applicants respectfully assert that the basis for rejecting Claims 1, 3-5, 7, 15-19 and 21 under 35 U.S.C. § 102(b) is traversed.

103 Rejections

The instant Office Action states that Claims 6 and 20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Rodgers in view of Saitoh (U.S. Patent No. 6,060,739). The Applicants have reviewed the cited references and respectfully submit that the present invention as recited in Claims 6 and 20 is not anticipated nor rendered obvious by Rodgers and Saitoh, alone or in combination.

Claims 6 and 20 are dependent on independent Claim 1 and 15, respectively, and recite additional limitations. As presented above, Applicants respectfully submit that Rodgers does not show or suggest the present invention as recited in Claims 1 and 15.

Furthermore, Applicants respectfully submit that Saitoh does not overcome the shortcomings of Rodgers. Looking at Figures 6 and 14 of Saitoh, for example, the bit lines 16 or 106 appear to be situated in part within a silicon substrate 11; however, the bit lines of Saitoh are not “enclosed within and surrounded by said silicon substrate” as recited in independent Claim 1.

Also, the bit lines 16 and 106 of Saitoh do not show or suggest a “bit line in cross-section having a first portion and a second portion that is essentially at a right angle to said first portion, wherein a first portion of a first bit line is essentially parallel to a first portion of a second bit line, wherein said first portion of said first bit line and said first portion of said second bit line lie in different planes, and wherein further a second portion of said first line and a second portion of said second bit line lie in essentially the same plane” as recited in independent Claim 15. In cross-section, the portions of the bit lines 106 of Saitoh that are at right angles to each other each lie in the same plane; that is, Saitoh does not show or suggest bit lines (which run in parallel to each other) having portions that lie in different planes, as recited in independent Claim 15.

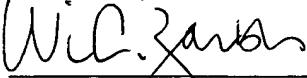
Thus, Applicants respectfully submit that independent Claims 1 and 15 are not shown or suggested by Rodgers and Saitoh, alone or in combination. Applicants further submit that Claims 6 and 20 are therefore not shown by Rodgers and Saitoh, alone or in combination, because Claims 6 and 20 are dependent on Claim 1 or 15 and recite additional limitations. As such, the Applicants respectfully assert that the basis for rejecting Claims 6 and 20 under 35 U.S.C. § 103(a) is traversed.

Conclusions

In light of the above remarks, Applicants respectfully request reconsideration of the rejected claims. Based on the arguments presented above, Applicants respectfully assert that Claims 1, 3-7 and 15-21 overcome the rejections of record and, therefore, Applicants respectfully solicit allowance of these claims.

The Examiner is invited to contact Applicants' undersigned representative if the Examiner believes such action would expedite resolution of the present Application.

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Respectfully submitted,
WAGNER, MURABITO & HAO LLP


William A. Zarbis
Reg. No. 46,120

Two North Market Street
Third Floor
San Jose, California 95113
(408) 938-9060